

All communications respecting this case should identify it by number and names of parties.



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**PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES**

Applicants: Jones et al.
Serial No.: 08/207,241
Filed: 03/07/94
For: METHOD AND REAGENTS FOR
AMPLIFYING NUCLEIC ACID SEQUENCES
Accorded Benefit of: U.S. Serial
No. 07/220,108 filed 06/24/88

The case referred to above has been forwarded to the Board of Patent Appeals and Interferences because it is adjudged to interfere with other cases hereafter specified. Attention is directed to the fact that this interference is declared pursuant to 37 CFR 1.601 et seq., effective February 11, 1985 (49 F.R. 48416. 1050 O.G. 385). The interference is designated as No. 103,420.

By direction of the Commissioner of Patents and Trademarks and as required by 35 USC 135(c), notice is hereby given the parties of the requirement of the law for filing in the Patent and Trademark Office a copy of any agreement "in connection with or in contemplation of the termination of the interference."

The cases involved in this interference are:

Junior Party

Applicant: David Segev

Address: 64 Amsterdam Avenue, Passaic, NJ 07055

Serial No.: 07/784,749 filed 10/28/91

For: PROCESS FOR AMPLIFYING AND DETECTING NUCLEIC ACID SEQUENCES

Assignees: None

Attorneys of Record: Marvin C. Soffen, Samuel H. Weiner, Jerome M. Berliner, Robert C. Faber, Edward A. Meilman, Stanley H. Lieberstein and Steven I. Weisburd

Associate Attorney: None

Accorded Benefit of: U.S. Serial No. 07/221,750 filed 07/20/88, now abandoned

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Junior Party

Applicants: Theodore Jones and Rodney M. Richards

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Serial No.: 08/207,241 filed 03/07/94

For: METHOD AND REAGENTS FOR AMPLIFYING NUCLEIC ACID SEQUENCES

Assignees: Amgen Inc.

Attorneys of Record: Julia E. Abers, Thomas E. Byrne, Steven M. Odre, Pamela A. Simonton and Robert D. Weist

Associate Attorney: None

Accorded Benefit of: U.S. Serial No. 07/220,108 filed 06/24/88

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Junior Party

Applicant: R. Bruce Wallace

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Serial No.: 07/996,771 filed 12/24/92

For: LIGATION AMPLIFICATION OF NUCLEIC ACID SEQUENCES

Assignee: City of Hope, Diarte, CA

Attorney of Record: Edward S. Irons

Associate Attorney: None

Accorded Benefit of: U.S. Serial Nos. 07/870,221 filed 04/20/92
and 07/178,377 filed 04/06/88

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Senior Party

Applicants: Keith C. Backman and Chang-Ning J. Wang

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14 Ansie Road, Chelmsford, MA 01824

Serial No.: 08/015,076 filed 02/08/93

For: ASSAY USING TEMPLATE-DEPENDENT NUCLEIC ACID PROBE
REORGANIZATION

Assignees: Abbott Laboratories

Attorneys of Record: Thomas D. Brainard, Thomas M. Breininger,
Daniel W. Collins, Steven R. Crowley,
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Clifford A. Dean, Lonnie R. Drayer, Richard A. Elder, Edward H. Gorman, Jr., Jerry F. Janssen, James D. McNeil, Donald O. Nickey, Lawrence S. Pope, Priscilla E. Porembski, Richard D. Schmidt, Harry G. Thibault, Arthur N. Trausch, III, Frank S. Ungemach, Steven F. Weinstock, Robert E. Wexler, James L. Wilcox and Wean Khing Wong

Associate Attorneys: Robert L. Baechtold and Lawrence S. Perry

Accorded Benefit of: U.S. Serial Nos. 07/720,739 filed 06/25/91
and 07/131,936 filed 12/11/87

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Count 1

A method of amplifying target nucleic acid in a sample comprising the steps of:

(a) providing nucleic acid of the sample as single-stranded nucleic acid;

(b) providing in the sample a stoichiometric excess of at least four nucleic acid probes, wherein: i) the first and second of said probes are primary probes, and the third and fourth of said probes are secondary nucleic acid probes: ii) the first probe is a single strand capable of hybridizing to a first segment of a primary strand of the target nucleic acid; iii) the second probe is a single strand capable of hybridizing to a second segment of said primary strand of the target nucleic acid; iv) the 5' end of the first segment of said primary strand of the target is positioned relative to the 3' end of the second segment of said primary strand of the target to enable joining of the first probe to the second probe, when said probes are hybridized to said primary strand of said target nucleic acid, thus forming a reorganized primary molecule having a first portion and a second portion; v) the third probe is capable of hybridizing to a first portion of the reorganized primary molecule; and vi) the fourth probe is capable of hybridizing to a second portion of the reorganized primary molecule, the first portion of the reorganized primary molecule being positioned relative to the second portion of the reorganized primary molecule to enable joining the third probe to the fourth probe when said third and

fourth probes are hybridized to said reorganized primary molecule, thus forming a reorganized secondary molecule, said first, second, third, and fourth probes being provided at concentrations to enable said joining;

(c) repeatedly performing the following cycle:

i) hybridizing said probes with nucleic acid in said sample:

ii) performing said joining to form said reorganized molecules; and

iii) denaturing nucleic acid in said sample.

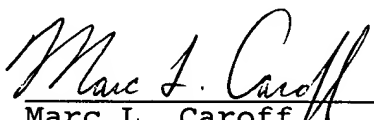
The claims of the parties which correspond to this count are:

Segev : Claims 32-35

Jones et al. : Claims 1-21

Wallace : Claims 5-9, 11-17 and 19-28

Backman et al.: Claims 1-2, 4-9, 11-19 and 22-48



Marc L. Caroff
Administrative Patent Judge
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gjh